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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,628	05/19/2004	Radu C. Frangopol	7463-49 (CE11311JSW)	6559
30448	7590	02/06/2006	EXAMINER	
AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188			RUSSELL, CHRISTINA MARIE	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/849,628

Applicant(s)

FRANGOPOL ET AL.

Examiner

Christina Russell

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by the US patent application publication to Boudet et al. (US 2001/0045155)

3. In terms of independent claim 1, Boudet et al. teaches a method of scaling or compressing polyphony by first identifying the music data with the appropriate assigned priority, comparing the polyphony needed to play said music data with the available polyphony of a sound generating device, and if the polyphony needed to play the music data exceeds the availability of the sound generating device, one or more of the instruments used to generate the data will be drop according to the assigned priorities (see page 1, paragraphs [0001] and [0012] – [0018]).

4. As for claim 2, Boudet et al. teaches said sound generating device as a mobile communication device or mobile phone (see page 1, paragraph [0001]).

5. As for claim 3, Boudet et al. teaches the ability to identify one or more instruments as having a low priority (see page 1, paragraph [0018]).

6. As for claim 4, dependent upon claim 3, Boudet et al. also teaches one of the identified instruments as having the lowest priority (see page 1, paragraph [0018], and page 4, paragraph [0056]).

7. As for claim 5, dependent upon independent claim 1, Boudet et al. teaches that the sound generating device is limited to the polyphony it can generate, for example "N" instruments, and that when the music data is played it comprises only those instruments having a priority of 1 to "N" (see page 2, paragraphs [0029] – [0031]).

8. In terms of independent claim 10, Boudet et al. again teaches a method of scaling or compressing polyphony by first identifying the music data with the appropriate assigned priority, comparing the polyphony needed to play said music data with the available polyphony of a sound generating device, and if the polyphony needed to play the music data exceeds the availability of the sound generating device, one or more of the instruments used to generate the data will be drop according to the assigned priorities, but Boudet et al. also teaches this method as a machine readable storage, using a computer program comprising instruction codes (see page 1, paragraphs [0001] and [0012] – [0018], and page 2, paragraphs [0028], [0029], and [0036]).

9. As for claim 11, Boudet et al. also teaches, as in claim 2, said sound generating device as a mobile communication device, or mobile phone (see page 1, paragraph [0001]).

10. As for claim 12, similar to claim 3, Boudet et al. again teaches the ability to identify one or more instruments as having a low priority (see page 1, paragraph [0018]).

11. As for claim 13, dependent upon claim 12, and similar to claim 4, Boudet et al. again teaches one of the identified instruments as having the lowest priority (see page 1, paragraph [0018], and page 4, paragraph [0056]).

12. And as for claim 14, dependent upon claim 10, and similar to claim 5, Boudet et al. teaches that the sound generating device is limited to the polyphony it can generate, for example "N" instruments, and that when the music data is played it comprises only those instruments having a priority of 1 to "N" (see page 2, paragraphs [0029] – [0031]).

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 6-9 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boudet et al. in view of the US patent application publication to Holm et al. (US 2004/0159219).

15. As for claims 6 and 7, dependent upon claim 1, Boudet et al. teaches better compression rates by assigning instrument families and having one instrument represent that family, but also providing the ability to substitute that designated instrument with another from the family (see page 3, paragraphs [0042]- [0043]). Boudet

et al. also teaches the ability the user possesses for manually changing the priorities of instruments if they prefer one instrument over another (see page 4, paragraph [0049]) and also the moving of notes if they reside outside the bandwidth or threshold (see page 4, paragraph [0051]). Boudet et al. does not however teach the substituting of instrument voices if an instrument is lower than the bandwidth or threshold, only the ability to move notes. Holm et al. does however teach this substituting of instruments to meet a required quality of a sound set (see page 3, paragraph [0035]). Holm et al. also teaches this idea of scaling polyphony in mobile units in order to gain the best sound quality with the memory and resources available. Therefore it would have been obvious to one of ordinary skill in the art, at the time of the invention, to incorporate this substitution of instruments idea to meet the required sound quality, presented by Holm et al., into the similar invention presented by Boudet et al., which already has the ability to compare bandwidth thresholds, and provide instrument families with substitute instruments.

16. In terms of claims 8 and 9, Boudet et al. again teaches all the similar claimed elements as presented in claims 1 and 2, including those elements present in claim 6, but as mentioned above Boudet et al. does not teach the substituting of instrument voices if an instrument is lower than the bandwidth or threshold, only the ability to move notes. Holm et al. again teaches these missing elements and therefore for the reasons stated above it would have been obvious to incorporate the ideas taught by Holm et al. into the invention of Boudet et al.

17. As for claims 15 and 16, similar to claim 6 and 7, it would again have been obvious to combine the teaches of Boudet et al. and Holm et al. for the same reasons as stated above.

18. Lastly, in terms of claims 17 and 18, Boudet et al. again teaches all the similar elements as presented in claims 1, 2, and 10, and those touched upon in claim 6, but again does not teach the substituting of instrument voices if an instrument is lower than the bandwidth or threshold. Holm et al. does however teach these missing elements and therefore it would have again been obvious to combine the teachings of these two references for the reasons stated above.

### ***Conclusion***


19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US patent applications to Hamalainen et al. (US 2004/0267541) and Virolainen et al. (US 2004/0209629), and the US patent to France et al. (5,734,119).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Russell whose telephone number is 571-272-4350. The examiner can normally be reached on Mon-Fri, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 571-272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CR  
01/30/2006



MARLON T. FLETCHER  
PRIMARY EXAMINER